LISTING OF THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based method and a TCP/IP (Transmission Control Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center (MPC), a home location register (HLR), and a position determination Entity (PDE), comprising the steps of:

a terminal connecting to a client server for being provided a location based service (LBS);

said client server carrying out an authentication and selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method;

in case of a TCP/IP-based method being selected, said client server transmitting a PDE URL to MS, and then sending an information by a signal to MPC; and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC;

said MPC transmitting a request signal for the information of said MS to HLand receiving the response;

after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE;

said PDE obtaining the location information of said MS from said MS by the selected type of method; and

said PDE transmitting the obtained location information of said MS to said client server through said MPC.

2. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said terminal connecting to said client server is a terminal able to connect to a client server using a wireless application protocol(WAP) such as a cellular phone, a personal digital assistant(PDA), or the like.

3. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that, in said step of selecting one of said DBM-based method and said TCP/IP-based method, said client server selects said TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information is to be provided, and otherwise, said client server selects said DBM-based method.

4. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS through the communication line, using WAP, established already.

5. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS using a short message service(SMS).

6. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said signal, sent to said MPC, from said client server contains the information on the selected type of method for providing the service.

7. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

characterized in that said information of MS, requested by said MPC to said HLR, contains the number of said MS and the information on the mobile switching center (MSC) controlling said MS.

8. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

characterized in that said corresponding information contained in said signal, being transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains the information on the type of method selected by said client server and the information on the mobile switching center(MSC) controlling said MS.

9. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a DBM-based method, said PDE that received said signal transmitted by said MPC requesting a GPS location information of said MS to said MS; and

said MS that received said request transmitting the GPS location information to said PDE.

10. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 9,

characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by SMS-based communication complying with IS-801-1 standard.

11. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a TCP/IP-based method, said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL; and

said MS that connected to said PDE providing its own GPS location information to said PDE.

12. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11,

characterized in that said step of said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL includes the step of said PDE that received a signal transmitted by said MPC waiting for said connection by said MS.

13. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11,

characterized in that said step of said MS that connected to said PDE providing its own GPS location information to said PDE comprises the steps of:

said PDE requesting a GPS location information to said MS connected to said PDE; and

said MS providing the GPS location information to said PDE in response to said request.

14. (Currently Amended) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11,

characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by TCP/IP-based communication complying with IS-801-1 standard.

15. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1,

characterized by further comprising, after the step of said PDE transmitting the location information of said MS to said client server through said MPC, the step of providing a corresponding location based service(LBS) requested by said terminal connected to said client server by using said location information of said MS received by said client server.

16. (Previously Presented) A method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based method and a TCP/IP (Transmission Control Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center (MPC), a home location register (HLR), and a position determination Entity (PDE), comprising the steps of:

a terminal connecting to a client server for being provided a location based service (LBS);

said client server carrying out an authentication and selecting a method among a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method;

in case of a TCP/IP-based method being selected, said client server sending an information by a signal to MPC, and then transmitting a PDE URL to MS; and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC;

said MPC transmitting a request signal for the information of said MS to HLR and receiving the response;

after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE;

said PDE obtaining the location information of said MS from said MS by the selected type of method; and

said PDE transmitting the obtained location information of said MS to said client server through said MPC.

17. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said terminal connecting to said client server is a terminal able to connect to a client server using a wireless application protocol(WAP) such as a cellular phone, a personal digital assistant(PDA), or the like.

18. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method *as* claimed in Claim 16,

characterized in that, in said step of selecting one of said DBM-based method and said TCP/IP-based method, said client server selects said TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information is to be provided, and otherwise, said client server selects said DBM-based method.

19. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS through the communication line, using WAP, established already.

20. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS using a short message service(SMS).

21. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said signal, sent to said MPC, from said client server contains the information on the selected type of method for providing the service.

22. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said information of MS, requested by said MPC to said HLR, contains the number of said MS and the information on the mobile switching center (MSC) controlling said MS.

23. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said corresponding information contained in said signal, being transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains the information on the type of method selected by said client server and the information on the mobile switching center(MSC) controlling said MS.

24. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a DBM-based method, said PDE that received said signal transmitted by said MPC requesting a GPS location information of said MS to said MS; and

said MS that received said request transmitting the GPS location information to said PDE.

25. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 24,

characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by SMS-based communication complying with IS-801-1 standard.

26. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of:

in case that said selected type of method is a TCP/IP-based method, said

MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL; and

said MS that connected to said PDE providing its own GPS location information to said PDE.

27. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26,

characterized in that said step of said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL includes the step of said PDE that received a signal transmitted by said MPC waiting for said connection by said MS.

28. (Original) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26,

characterized in that said step of said MS that connected to said PDE providing its own GPS location information to said PDE comprises the steps of:

said PDE requesting a GPS location information to said MS connected to said PDE; and

said MS providing the GPS location information to said PDE in response to said request.

29. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 26,

characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by TCP/IP-based communication complying with IS-801-1 standard.

30. (Previously Presented) A method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 16,

characterized by further comprising, after the step of said PDE transmitting the location information of said MS to said client server through said MPC, the step of providing a corresponding location based service(LBS) requested by said terminal connected to said client server by using said location information of said MS received by said client server.